ABSTRACT OF THE DISCLOSURE

An input image, while linear interpolation processing of a picture element is performed, is magnified up to a desired magnification to obtain

5   an interpolation transformed image. On the other hand, the input image is divided into two or more domain blocks with a specified size. By using the Fractal processing, range blocks having high similarity based on self-similarity. The size of the range block is a size of the domain block magnified by the transform magnification. By replacing each domain block

10 image within the input image with the range block having high similarity to the domain block, a Fractal transformed image is obtained. By using the output of the interpolation transformed image, the continuity of the whole image is assured, and by utilizing picture element values of the Fractal transformed image, the faithfulness in detailed regions of the image is

15 ensured.